

U.S. Patent No. 6,770,861 B2  
Attorney Docket No.: 15162/03270



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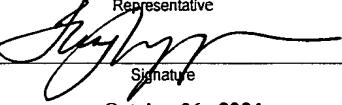
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

U.S. Patent No.: 6,770,861 B2  
Issued: August 3, 2004  
From: U.S. Serial No. 09/782,706  
Filed: February 13, 2001  
For: IMAGE-SENSING DEVICE  
By: Yoshio HAGIHARA

Certificate  
NOV 03 2004  
of Correction

Certificates of Correction Branch  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Certificates of Correction Branch, Commissioner for Patents, P.O. BOX 1450, Alexandria, Va. 22313-1450 on:
<u>October 26, 2004</u>
Date of Deposit
<u>Tung T. Nguyen</u>
Name of Applicant, Assignee, or Registered Representative

Signature
<u>October 26, 2004</u>
Date of Signature

**REQUEST FOR CERTIFICATE OF CORRECTION**  
**DUE TO PATENT AND TRADEMARK OFFICE ERROR**

It is respectfully requested that a Certificate of Correction be issued for U.S. Patent No. 6,770,861 B2, issued August 3, 2004, for the purpose of correcting errors that occurred in the printing of the patent.

Attached in duplicate are Forms PTO-1050 (PTO/SB/44), with at least one copy of each being suitable for printing.

NOV 08 2004

U.S. Patent No. 6,770,861 B2  
Attorney Docket No.: 15162/03270

The printing errors contained in U.S. Patent No. 6,770,861 B2 are set forth below along with an explanation as to the reasons for the errors:

The Patent and Trademark Office erroneously failed to include in issued U.S. Patent No. 6,770,861 B2, application claims 18, 19, 20, and 21 that were added by the Preliminary Amendment that accompanied Applicants' Request for Continued Examination (RCE) Pursuant to 37 C.F.R. § 1.114, filed with the Patent and Trademark Office on January 15, 2004.

The examiner allowed claims 18, 19, 20, and 21, as well as claims 4-6 and 10-16 (claims 4-6 and 10-16 do appear in the issued patent), in the Notice of Allowance dated March 29, 2004 (a copy of which is attached hereto).

The issued patent should contain all fourteen (14) allowed claims, not just the incorrect amount of ten (10) printed and contained in the patent.

Note that before issuance of the above-identified patent, the Patent and Trademark Office renumbered application claims 4-6 and 10-16 in the issued patent as follows:

Application claim 4 (an independent claim) was renumbered and printed by the Patent and Trademark Office as patent claim 1.

Application claim 5 (an independent claim) was renumbered and printed by the Patent and Trademark Office as patent claim 2.

Application claim 6 (an independent claim) was renumbered and printed by the Patent and Trademark Office as patent claim 3.

Application claim 10 (an independent claim) was renumbered and printed by the Patent and Trademark Office as patent claim 4.

Application claim 11 (a dependent claim, which depends from application claim 10 (patent claim 4)) was renumbered and printed by the Patent and Trademark Office as patent claim 5.

Application claim 12 (a dependent claim, which depends from application claim 11 (patent claim 5)) was renumbered and printed by the Patent and Trademark Office as patent claim 6.

Application claim 13 (a dependent claim, which depends from application claim 10 (patent claim 4)) was renumbered and printed by the Patent and Trademark Office as patent claim 7.

Application claim 14 (a dependent claim, which depends from application claim 10 (patent claim 4)) was renumbered and printed by the Patent and Trademark Office as patent claim 8.

Application claim 15 (a dependent claim, which depends from application claim 10 (patent claim 4)) was renumbered and printed by the Patent and Trademark Office as patent claim 9.

Application claim 16 (a dependent claim, which depends from application claim 10 (patent claim 4)) was renumbered and printed by the Patent and Trademark Office as patent claim 10.

Rightly, since the Patent and Trademark Office erroneously failed to include allowed application claims 18-21 in the issued patent, application claim 18 should be renumbered as patent claim 11, application claim 19 should be renumbered as patent claim 12 (which should depend from patent claim 11 since application claim 19 depends from application claim 18 ), application claim 20 should be renumbered as patent claim 13, and application claim 21 should be renumbered as patent claim 14.

The correct allowed claim texts for application claims 18-21 should be added to the issued patent as set forth herein and in the accompanying proposed Forms PTO-1050 (PTO/SB/44) and issue correctly as part of a Certificate of Correction.

[[18.]] 11. An image-sensing device comprising:

a plurality of pixels for outputting a plurality of color signals natural-logarithmically proportional to amounts of light received in different color ranges, said plurality of color signals including a red signal, green signal and blue signal;

an initial state setting portion for correcting the plurality of color signals output from each pixel according to a specific correlation among the color signals at an intensity of illumination;

a detecting portion for respectively detecting each signal level of first and second color signals of the plurality of color signals relative to a signal level of a third color signal selected from the plurality of color signals as a reference signal; and

a white balance adjustment portion for further correcting the plurality of color signals already corrected by the initial state setting portion according to the specific correlation among the color signals on the basis of the detection of the signal levels.

[[19]] 12. An image-sensing device according to claim [[18]] 11, wherein the first color signal is the red signal, the second color signal is the blue signal and the third color signal is the green signal.

[[20]] 13. An image-sensing device comprising:

a plurality of pixels for outputting a plurality of color signals natural-logarithmically proportional to amounts of light received in different color ranges;

an initial state setting portion for correcting the plurality of color signals output from each pixel according to a specific correlation among the color signals at an intensity of illumination;

a detecting portion for detecting a signal level of at least one color signal of the

plurality of color signals relative to a signal level of another color signal selected from the plurality of color signals as a reference signal; and

a white balance adjustment portion for further correcting the plurality of color signals already corrected by the initial state setting portion according to the specific correlation among the color signals on the basis of the detection of the signal level.

[[21]] 14. An image-sensing device comprising:

a plurality of pixels for outputting a plurality of color signals natural-logarithmically proportional to amounts of light received in different color ranges;

an initial state setting portion for correcting the plurality of color signals output from each pixel according to a specific correlation among the color signals at an intensity of illumination;

a signal level detecting portion that comprises a plurality of integrator circuits and comparator circuits, wherein the integrator circuits are for integrating the color signals output from each pixel and the comparator circuits are for detecting a signal level of at least one color signal of the integrated color signals relative to a signal level of another color signal selected from the integrated color signals as a reference signal; and

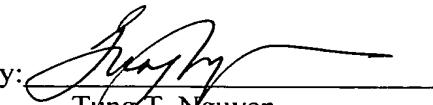
a white balance adjustment portion for further correcting the plurality of color signals already corrected by the initial state setting portion according to the specific correlation among the color signals on the basis of the detection of the signal level.

The foregoing serious errors occurred in the printing of the patent, and thus constitute errors made by the Patent and Trademark Office. Therefore, no fee is incurred for preparation of the proposed certificate of correction.

U.S. Patent No. 6,770,861 B2  
Attorney Docket No.: 15162/03270

Please issue a Certificate of Correction for the above-identified U.S. Patent No. 6,770,861 B2 containing all of the allowed claims, and transmit the Certificate to the attorney whose signature and address appear below.

Respectfully submitted,

By:   
Tung T. Nguyen  
Reg. No. 42,935  
Attorney for Patentee

TNT:TTN:pm  
SIDLEY AUSTIN BROWN & WOOD LLP  
717 North Harwood, Suite 3400  
Dallas, Texas 75201  
(214) 981-3478 Direct  
(214) 981-3300 Main  
(214) 981-3400 Facsimile  
October 26, 2004



## UNITED STATES PATENT AND TRADEMARK OFFICE

COPY

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[www.uspto.gov](http://www.uspto.gov)

## NOTICE OF ALLOWANCE AND FEE(S) DUE

24367 03/29/2004  
SIDLEY AUSTIN BROWN & WOOD LLP  
717 NORTH HARWOOD  
SUITE 3400  
DALLAS, TX 75201

RECEIVED-DOCKETING

APR 19 2004

SABW-DALLAS

EXAMINER

HO, ALLEN C

ART UNIT

PAPER NUMBER

2882

DATE MAILED: 03/29/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,706	02/13/2001	Yoshio Hagiwara	15162/03270	5328

TITLE OF INVENTION: IMAGE-SENSING DEVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	06/29/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

## HOW TO REPLY TO THIS NOTICE:

## I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

Applicant claims SMALL ENTITY status.  
See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



# UNITED STATES PATENT AND TRADEMARK OFFICE

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[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,706	02/13/2001	Yoshio Hagibara	15162/03270	5328
24367	7590	03/29/2004	EXAMINER	
SIDLEY AUSTIN BROWN & WOOD LLP 717 NORTH HARWOOD SUITE 3400 DALLAS, TX 75201			HO, ALLEN C	
			ART UNIT	PAPER NUMBER
			2882	

DATE MAILED: 03/29/2004

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 30 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 30 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

<b>Notice of Allowability</b>	Application No.	Applicant(s)
	09/782,706	HAGIHARA, YOSHIO
	Examiner Allen C. Ho	Art Unit 2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to RCE filed on 15 January 2004.

2.  The allowed claim(s) is/are 4-6, 10-16 and 18-21.

3.  The drawings filed on 13 February 2001 are accepted by the Examiner.

4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All    b)  Some\*    c)  None    of the:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.

(a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached  
1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.

(b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of  
Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other _____.  |

**DETAILED ACTION**

***Allowable Subject Matter***

1. Claims 4-6, 10-16, and 18-21 are allowed.
2. The following is an examiner's statement of reasons for allowance:

With regard to claims 4-6 and 10-16, the reasons for allowance were set forth in the previous office action.

With regard to claims 18-21, the prior art fails to teach or fairly suggest an imaging-sensing device comprising an initial state setting portion for correcting the plurality of color signals output from each pixel according to specific correlation among the color signals at intensity of illumination and a white balance adjustment portion for further correcting the plurality of color signals already corrected by the initial state setting portion according to the specific correlation among the color signals on the basis of the detection of the signal levels as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Art Unit: 2882

- (1) Suh (U. S. Patent No. 5,508,739) disclosed a white-balance adjusting apparatus and a method for a video camera.
- (2) Yamamoto *et al.* (U. S. Patent No. 5,481,302) disclosed a white balance adjustment apparatus.
- (3) Saito *et al.* (U. S. Patent No. 5,319,449) disclosed a white balance control device.

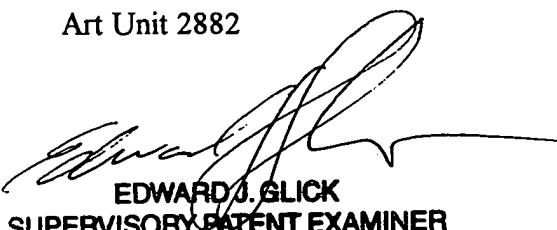
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen C. Ho whose telephone number is (571) 272-2491. The examiner can normally be reached on Monday - Friday from 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward J. Glick can be reached at (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Allen C. Ho  
Patent Examiner  
Art Unit 2882

ACH ACH 04.03.2004



EDWARD J. GLICK  
SUPERVISORY PATENT EXAMINER

**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**

PATENT NO : 6,770,861 B2

Page 1 of 4

DATED : August 3, 2004

INVENTOR(S) : Yoshio Hagiwara

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 18:

After the end of claim 10, insert the following:

--11. An image-sensing device comprising:  
 a plurality of pixels for outputting a plurality of color signals natural-logarithmically proportional to amounts of light received in different color ranges, said plurality of color signals including a red signal, green signal and blue signal;  
 an initial state setting portion for correcting the plurality of color signals output from each pixel according to a specific correlation among the color signals at an intensity of illumination;  
 a detecting portion for respectively detecting each signal level of first and second color signals of the plurality of color signals relative to a signal level of a third color signal selected from the plurality of color signals as a reference signal; and a white balance adjustment portion for further correcting the plurality of color signals already corrected by the initial state setting portion according to the specific correlation among the color signals on the basis of the detection of the signal levels.--.

MAILING ADDRESS OF SENDER:

PATENT NO. 6,770,861 B2

Sidley Austin Brown & Wood LLP  
 717 North Harwood, Suite 3400  
 Dallas, Texas 75201

No. of additional copies



This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Certificates of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO : 6,770,861 B2

Page 2 of 4

DATED : August 3, 2004

INVENTOR(S) : Yoshio Hagihara

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 18:

After the end of newly added claim 11, insert the following:

--12. An image-sensing device according to claim 11, wherein the first color signal is the red signal, the second color signal is the blue signal and the third color signal is the green signal.--.

MAILING ADDRESS OF SENDER:

PATENT NO. 6,770,861 B2

Sidley Austin Brown & Wood LLP  
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## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO : 6,770,861 B2

Page 3 of 4

DATED : August 3, 2004

INVENTOR(S) : Yoshio Haghara

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 18:

After the end of newly added claim 12, insert the following:

--13. An image-sensing device comprising:  
a plurality of pixels for outputting a plurality of color signals natural-logarithmically proportional to amounts of light received in different color ranges;  
an initial state setting portion for correcting the plurality of color signals output from each pixel according to a specific correlation among the color signals at an intensity of illumination;  
a detecting portion for detecting a signal level of at least one color signal of the plurality of color signals relative to a signal level of another color signal selected from the plurality of color signals as a reference signal; and  
a white balance adjustment portion for further correcting the plurality of color signals already corrected by the initial state setting portion according to the specific correlation among the color signals on the basis of the detection of the signal level.--.

MAILING ADDRESS OF SENDER:

PATENT NO. 6,770,861 B2

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Dallas, Texas 75201

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## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO : 6,770,861 B2

Page 4 of 4

DATED : August 3, 2004

INVENTOR(S) : Yoshio Haghara

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 18:

After the end of newly added claim 13, insert the following:

-- 14. An image-sensing device comprising:  
a plurality of pixels for outputting a plurality of color signals natural-logarithmically proportional to amounts of light received in different color ranges;  
an initial state setting portion for correcting the plurality of color signals output from each pixel according to a specific correlation among the color signals at an intensity of illumination;  
a signal level detecting portion that comprises a plurality of integrator circuits and comparator circuits, wherein the integrator circuits are for integrating the color signals output from each pixel and the comparator circuits are for detecting a signal level of at least one color signal of the integrated color signals relative to a signal level of another color signal selected from the integrated color signals as a reference signal; and  
a white balance adjustment portion for further correcting the plurality of color signals already corrected by the initial state setting portion according to the specific correlation among the color signals on the basis of the detection of the signal level.-- .

MAILING ADDRESS OF SENDER:

PATENT NO. 6,770,861 B2

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This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Certificates of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**

PATENT NO : 6,770,861 B2

Page 1 of 4

DATED : August 3, 2004

INVENTOR(S) : Yoshio Haghara

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 18:

After the end of claim 10, insert the following:

--11. An image-sensing device comprising:  
 a plurality of pixels for outputting a plurality of color signals natural-logarithmically proportional to amounts of light received in different color ranges, said plurality of color signals including a red signal, green signal and blue signal;  
 an initial state setting portion for correcting the plurality of color signals output from each pixel according to a specific correlation among the color signals at an intensity of illumination;  
 a detecting portion for respectively detecting each signal level of first and second color signals of the plurality of color signals relative to a signal level of a third color signal selected from the plurality of color signals as a reference signal; and a white balance adjustment portion for further correcting the plurality of color signals already corrected by the initial state setting portion according to the specific correlation among the color signals on the basis of the detection of the signal levels.--.

MAILING ADDRESS OF SENDER:

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This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Certificates of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**

PATENT NO : 6,770,861 B2

Page 2 of 4

DATED : August 3, 2004

INVENTOR(S) : Yoshio Haghara

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**Column 18:**

After the end of newly added claim 11, insert the following:

--12. An image-sensing device according to claim 11, wherein the first color signal is the red signal, the second color signal is the blue signal and the third color signal is the green signal.--.

MAILING ADDRESS OF SENDER:

PATENT NO. 6,770,861 B2

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**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**

PATENT NO : 6,770,861 B2

Page 3 of 4

DATED : August 3, 2004

INVENTOR(S) : Yoshio Hagihara

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 18:

After the end of newly added claim 12, insert the following:

--13. An image-sensing device comprising:  
 a plurality of pixels for outputting a plurality of color signals natural-logarithmically proportional to amounts of light received in different color ranges;  
 an initial state setting portion for correcting the plurality of color signals output from each pixel according to a specific correlation among the color signals at an intensity of illumination;  
 a detecting portion for detecting a signal level of at least one color signal of the plurality of color signals relative to a signal level of another color signal selected from the plurality of color signals as a reference signal; and  
 a white balance adjustment portion for further correcting the plurality of color signals already corrected by the initial state setting portion according to the specific correlation among the color signals on the basis of the detection of the signal level.--.

MAILING ADDRESS OF SENDER:

PATENT NO. 6,770,861 B2

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## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO : 6,770,861 B2  
DATED : August 3, 2004  
INVENTOR(S) : Yoshio Hagihara

Page 4 of 4

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 18:

After the end of newly added claim 13, insert the following:

--14. An image-sensing device comprising:  
a plurality of pixels for outputting a plurality of color signals natural-logarithmically proportional to amounts of light received in different color ranges;  
an initial state setting portion for correcting the plurality of color signals output from each pixel according to a specific correlation among the color signals at an intensity of illumination;  
a signal level detecting portion that comprises a plurality of integrator circuits and comparator circuits, wherein the integrator circuits are for integrating the color signals output from each pixel and the comparator circuits are for detecting a signal level of at least one color signal of the integrated color signals relative to a signal level of another color signal selected from the integrated color signals as a reference signal; and  
a white balance adjustment portion for further correcting the plurality of color signals already corrected by the initial state setting portion according to the specific correlation among the color signals on the basis of the detection of the signal level.--.

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